CURRENT CLAIMS

1. (Previously Presented) An inorganic electroluminescent device comprising in the following order:

an underlayer formed of a first compound semiconductor of Group IIa-VIb; and

a light emitting layer formed of a second compound semiconductor of Group IIa-VIb.

said first compound semiconductor and said second compound semiconductor having the same crystalline structure,

wherein the thickness of said light emitting layer is larger than the thickness of said underlayer.

2. (Previously Presented) The inorganic electroluminescent device according to claim 1, wherein said first compound semiconductor and said second compound semiconductor have a rock-salt structure.

3. (Original) The inorganic electroluminescent device according to claim 1, wherein said first compound semiconductor and said second compound semiconductor have an orientation in a <100> direction.

4. Original) The inorganic electroluminescent device according to claim 1, wherein the bandgap of said first compound semiconductor is larger than the bandgap of said second compound semiconductor.

5. (Original) The inorganic electroluminescent device according to claim 1, wherein said first compound semiconductor contains magnesium and sulfur, and said second compound semiconductor contains magnesium and sulfur.

6. (Original) The inorganic electroluminescent device according to claim 5, wherein said second compound semiconductor further contains calcium.

7. (Previously Presented) An inorganic electroluminescent device comprising in the following order:

an underlayer formed of a first compound semiconductor of Group IIa-VIb; and

a light emitting layer formed of a second compound semiconductor of Group IIa-VIb,

said first compound semiconductor and said second compound semiconductor having the same crystalline structure, wherein

said second compound semiconductor contains Mg_{1-x} Ca_xS, and the Ca composition ratio x is $0.1 \leqq x \leqq 0.15$.

8. (Original) The inorganic electroluminescent device according to claim 1, wherein the thickness of said underlayer is not larger than 500 nm.

9. (Original) The inorganic electroluminescent device according to claim 8, wherein the thickness of said underlayer is not larger than 200 nm.

10. (Cancelled).

11. (Previously Presented) An inorganic electroluminescent device comprising in the following order:

an underlayer formed of a first compound semiconductor of Group IIa-VIb; and

a light emitting layer formed of a second compound semiconductor of Group IIa-VIb,

said first compound semiconductor and said second compound semiconductor having the same crystalline structure, wherein

said light emitting layer contains a rare earth element or a transition metal element as a substance acting as a luminescent center.

12. (Original) The inorganic electroluminescent device according to claim 11, wherein said substance acting as the luminescent center is an element selected from the group consisting of europium, cerium, and manganese.

13. (Previously Presented) An inorganic electroluminescent device comprising in the following order:

an underlayer formed of a first compound semiconductor of Group IIa-VIb; and

a light emitting layer formed of a second compound semiconductor of Group IIa-VIb,

said first compound semiconductor and said second compound semiconductor having the same crystalline structure, wherein

said second compound semiconductor contains Mg_{1-x} Ca_xS, and Eu is doped into Mg_{1-x} Ca_xS as a substance acting as a luminescent center, and the composition ratio of Eu to Mg is not larger than 0.1.

14. (Original) The inorganic electroluminescent device according to claim 13, wherein the composition ratio of Eu to Mg is not larger than 0.01.

15. (Withdrawn) A method of fabricating an inorganic electroluminescent device, comprising the steps of:

forming an underlayer principally composed of a first compound semiconductor of Group II a-VIb; and

forming on said underlayer a light emitting layer principally composed of a second compound semiconductor of Group II a-VIb having the same crystalline structure as that of said first compound semiconductor and doped with a substance acting as a luminescent center.

16. (Withdrawn) The method according to claim 15, wherein

said step of forming a underlayer comprises the step of forming said underlayer at a first temperature, and

said step of forming a light emitting layer comprises the step of forming said light emitting layer at a second temperature higher than said first temperature.

17. (Withdrawn) The method according to claim 16, wherein said first temperature is not higher than 100°C, and said second temperature is higher than 100°C.

18. (Withdrawn) The method according to claim 16, wherein said second temperature is not lower than 150°C nor higher than 350°C.

19. (Withdrawn) The method according to claim 15, wherein

said first compound semiconductor contains magnesium and sulfur, and said second compound semiconductor contains magnesium and sulfur.

20. (Withdrawn) The method according to claim 19, wherein

said second compound semiconductor further comprises calcium.